REMARKS

In paragraph 1 of the final Action, claim 13 was objected to. In paragraph 3 of the final Action, claims 13-15 were rejected under 35 U.S.C. 112, second paragraph. In paragraphs 5-8 of the final Action, claims 1, 7-15 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ota et al., Endo et al. and Applicant's disclosure.

In view of the rejection, claims 11-13 have been cancelled, and the subject matter of cancelled claims 11-13 has been incorporated into claim 1. Incidentally, claim 13 depending from claim 1 should have been written to depend from claim 12, as stated in the objection to claim 13. Therefore, the present amendment combining claims 11-13 into claim 1 does not introduce new issue.

As clearly recited in claim 1, an antireflection film of the invention comprises an organic film, a hard-coating layer laminated on the organic film, a high refractive index layer laminated on the hard-coating layer, and a low refractive index layer laminated on the high refractive index layer.

The high refractive index layer is formed of metal oxide particles of ITO with electrical conductivity and TiO_2 with high refractive index, and at least one synthetic resin selected from the group consisting of styrene resin, epoxy resin and acrylic resin. A volume percentage of the TiO_2 particles to a total volume of the TiO_2 and ITO particles in the high refractive index layer is 1 to 60%, and a volume percentage of the metal oxide particles to a total volume of the metal oxide particles and the synthetic resin is 20% or more.

The low refractive index layer is formed of acrylic resin containing fluorine or silicone resin, and including particles of fluorine resin in an amount of 10 to 40% by weight to improve reduction of refractive index of the antireflection film, resistance to scuffing and slipperiness of the antireflection film.

In Ota et al., an antireflection film comprises a substrate 1, a hard coat layer 2, a high refractive index layer 5 and a low

refractive index layer 3. The high refractive index layer 5 is formed of a binder resin, and fine particles including TiO_2, CbO_2, SnO_2, ITO and so on.

In the invention, the high refractive index layer is formed of the metal oxide particles of ITO and TiO_2, and synthetic resin. Especially, a volume percentage of the TiO_2 particles to the total volume of the TiO_2 and ITO particles in the high refractive index layer is 1 to 60%. The specific volume percentage and the combination of the particles are not disclosed or suggested in Ota et al.

In the invention, also, the low refractive index layer is formed of acrylic resin containing fluorine or silicone resin, and including particles of fluorine resin in an amount of 10 to 40% by weight. In Ota et al., the low-refractive-index layer is a SiO_2 gel layer, different from that of the invention.

Accordingly, Ota et al. does not disclose or suggest the features of the invention.

In Endo et al., an ultra fine particle film includes a substrate 71, a layer 72 with high refractive index particles, and a layer 73 with low refractive index particles. As the fine particles, SnO_2, In_2O_3, TiO_2 and ZrO_2, and the mixture thereof may be used.

In the invention, the high refractive index layer is formed of the metal oxide particles of ITO and TiO_2, and synthetic resin, and the volume percentage of the TiO_2 particles to the total volume of the TiO_2 and ITO particles in the high refractive index layer is 1 to 60%. In Endo et al., the combination of ITO and TiO_2, and the specific ratio of the TiO_2 and ITO are not disclosed or suggested.

In the invention, the low refractive index layer is formed of acrylic resin containing fluorine or silicone resin, and including particles of fluorine resin in an amount of 10 to 40% by weight. In Endo et al., the layer 73 contains SiO_2, as shown in Tables 1 and 2., but the low refractive index layer of the invention is not disclosed.

Therefore, Endo et al. does not disclose or suggest the features of the invention.

In regard to the Applicant's Disclosure, paragraph 0006 was referred to, wherein acrylic resin and silicon resin are used as the low refractive index layer. However, the low refractive index layer of the invention is formed of acrylic resin containing fluorine or silicone resin, and including particles of fluorine resin in an amount of 10 to 40% by weight. The specific low refractive index layer of the invention is not disclosed in paragraph 0006 of the specification.

As stated on page 5, lines 3-4 of the final Action, it was held that Endo discloses that the low refractive index layer may comprise a binder with particles of silica. In claim 1 of the application, silica is excluded. Thus, the low refractive index layer of the invention is not disclosed or suggested in Endo et al. and Ota et al.

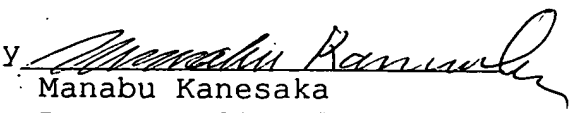
As explained above, the cited references do not disclose or suggest the features of the invention. Even if the cited references are combined, the present invention is not obvious from the cited references.

Reconsideration and allowance are earnestly solicited.

A one month extension of time is hereby requested. A check in the amount of $110.00 is attached herewith for the one month extension of time.

Respectfully Submitted,

KANESAKA AND TAKEUCHI

By 
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